Mr. Ed Vasicek
Lippert Components, Inc.
16700 Skyview Drive
Goshen, IN 46526

Re: 039-10691
First Significant Permit Revision to
FESOP 039-5477-00309

Dear Mr. Vasicek:

Lippert Components, Inc. was issued a permit on December 11, 1996 for a recreational vehicle (RV) and mobile home manufacturing source. A letter requesting changes to this permit was received on February 25, 1999. Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of an increase in capacity for both RV and mobile home frame production through the construction of additional paint bays and use of additional guns in existing bays. The modified source will continue to operate within 326 IAC 2-8 FESOP limits.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Patrick T. Brennan, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 516-691-3395 or in Indiana at 1-800-451-6027 (ext 516-691-3395).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
PTB/MES
cc: File - Elkhart County
U.S. EPA, Region V
Air Compliance Section Inspector - Greg D. Wingstrom
Compliance Data Section - Jerri Curless
Administrative and Development - Janet Mobley
Technical Support and Modeling - Nancy Landau

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR MANAGEMENT

Lippert Components-Indiana Frame Division
16700 Skyview Drive
Goshen, Indiana 46526

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F039-5477-00309	
Original issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996

First Minor Permit Modification: SMF039-9351	Pages Affected: 4, 6, 14, 18a, 19, 20, 20a-c, 22a
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

Second Minor Permit Modification: SMF039-10691	Pages Affected: 3, 4, 4a, 19, 20, 20a, 20d, 22a,b Section Added: D.3
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a mobile home metal frame manufacturing source.

Responsible Official:	Gary McPhail
Source Address:	16700 Skyview Drive, Goshen, Indiana 46526
Mailing Address:	16700 Skyview Drive, Goshen, Indiana 46526
Phone Number:	517-463-8341
SIC Code:	3440
County Location:	Elkhart
County Status:	Maintenance for Ozone Attainment for all other criteria pollutants
Source Status:	Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

(a) two (2) air assisted airless spray guns, located in two (2) booths identified as E-1 and E-2, and each equipped with dry filters for overspray control;

(b) two (2) air-assisted airless spray guns to be located in the existing permitted mobile home surface coating lines identified as E-1 and E-2, with a maximum capacity of coating 160.0 linear feet of metal mobile home frames per hour, and exhausted through two (2) existing stacks (S/V ID E1 and E2), respectively;

(c) one (1) air-assisted airless surface coating line, identified as E-3, with a maximum capacity of coating 166.01 linear feet of metal RV frames per hour, utilizing dry filters for particulate control, and exhausted through one (1) stack (S/V ID E3);

(d) four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and

(e) two (2) paint bays for the production of mobile home frames, identified as E-4, with airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

(b) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(c) Paved and unpaved roads and parking lots with public access.

(d) Welding activities emitting less than five (5)pounds per day or one (1) ton per year of a single HAP.

(e) Welding operations with PM_{10} emission less than twenty-five (25) pounds per day.

A.4 FESOP Applicability [326 IAC 2-8-2]
This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

(a) The Permittee shall also provide additional information as requested by IDEM, OAM, to determine the compliance status of the source in accordance with 326 IAC 2-8-5(a).

(b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that the IDEM, OAM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon written request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. For information claimed to be confidential, the Permittee shall furnish such records directly to both the U.S. EPA and IDEM, OAM, along with a claim of confidentiality.

Such confidentiality claims shall meet the requirements of 40 CFR Part 2, Subpart B (when submitting to U.S. EPA) and 326 IAC 17 (when submitting to IDEM, OAM).

SECTION D.1 FACILITY OPERATION CONDITIONS

(a)	two (2) air assisted airless spray guns, located in two (2) booths identified as E-1 and E-2, and each equipped with dry filters for overspray control;
(b)	two (2) air-assisted airless spray guns to be located on the existing permitted mobile home surface coating lines (E-1 and E-2), with a maximum capacity of coating 160.0 linear feet of metal mobile home frames per hour, and exhausted through two (2) existing stacks (S/V ID E1 and E2), respectively;
(c)	one (1) air-assisted airless surface coating line, identified as E-3, with a maximum capacity of coating 166.01 linear feet of metal RV frames per hour, utilizing dry filters for particulate control, and exhausted through one (1) stack (S/V ID E3);
(d)	four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and
(e)	two (2) paint bays for the production of mobile home frames, identified as E-4, with airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

Emissions Limitations [326 IAC 2-8-4(1)]

D.1.1 Volatile Organic Compounds [326 IAC 8-2-9]
Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating applied to the mobile home and RV metal frames shall be limited to 3.5 pounds of VOC per gallon of coating less water, for air dried coatings or forced warm air dried coatings at temperatures up to 194EFahrenheit;

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.2 Volatile Organic Compounds
The VOC usage at the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), shall be limited to a total of 99.0 tons per any twelve (12) consecutive months. This requirement satisfies the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), and shall render the requirements under 326 IAC 2-7 (Part 70 Program) not applicable.

D.1.3 Fine Particulate Matter (PM_{10})
The PM_{10} emissions from the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), shall not exceed 18.9 pounds per hour. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]
The PM from the four (4) surface coating lines, (E-1, E-2, E-3 and E-4) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.5 Hazardous Air Pollutants (HAPs)
The HAPs content delivered to the applicators of the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), including coatings, dilution solvents and cleanup solvents, shall be limited as follows:

a) The amount of any single hazardous air pollutant shall not exceed 9.9 tons per twelve (12) consecutive month rolling period.

b) The amount of any combination of HAPs shall not exceed twenty four (24) tons per twelve (12) consecutive month rolling period.

Compliance Determination Requirements

D.1.6 Volatile Organic Compounds (VOC)
Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.7 Particulate Matter Overspray
The dry filters for particulate matter overspray control shall be in operation at all times when the four (4) surface coating lines, (E-1, E-2, E-3 and E-4) are in operation.

D.1.8 Preventive Maintenance [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for each facility and its control device.

D.1.9 Monitoring
Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To document compliance with Conditions D.1.3 and D.1.4, observations shall be made weekly of the overspray while at least one of the booths is in operation.

Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.10 Daily Visible Emissions Notations
Daily visible emission notations of the spray booth stack exhaust, shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.11 Record Keeping Requirements
(a) To document compliance with the Conditions D.1.1, D.1.2 and D.1.6, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2, and the HAPs emission limits established in D.1.6.

(1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the month of use;

(3) The volume weighted VOC content of each coating used for each month;

(4) The cleanup solvent usage for each month;

(5) The total VOC and HAP usage for each month; and

(6) The weight of VOCs and HAPs emitted for each compliance period.

(b) To document compliance with Conditions D.1.9 and D.1.10, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventative Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements
A quarterly summary of the information to document compliance with Conditions D.1.2 and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities
(a) Welding activities emitting less than five (5)pounds per day or one (1) ton per year of a single HAP.
(b) Welding operations with PM_{10} emission less than twenty-five (25) pounds per day:

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3]
Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each facility shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate of one hundred (100) pounds per hour up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirement

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]
The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Lippert Components, Inc.-Indiana Frame Division
Source Address: 16700 Skyview Dr. Goshen, Indiana 46526
Mailing Address: 16700 Skyview Dr. Goshen, Indiana 46526
FESOP No.: F039-5477-00309, SMF-039-9351, and SMF 039-10691
Facility: Surface Coating Booths E-1, E-2, E-3, E-4
Parameter: VOC usage
Limit: 99 tons per twelve (12) consecutive month period

YEAR: _____

Month	VOC Usage (tons) This Month	VOC Usage (tons) Previous 11 Months	VOC Usage (tons/yr) 12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lippert Components, Inc.-Indiana Frame Division
Source Address: 16700 Skyview Dr. Goshen, Indiana 46526
Mailing Address: 16700 Skyview Dr. Goshen, Indiana 46526
FESOP No.: F039-5477-00309, SMF-039-9351, and SMF 039-10691
Facility: Surface Coating Booths E-1, E-2, E-3, E-4
Parameter: Hazardous Air Pollutants (HAPs)
Limit: Twenty four (24) tons of any combination of HAPS per twelve (12) consecutive month rolling period, 9.9 tons of any single HAP per twelve (12) consecutive month rolling period

YEAR: _____

Worst Case HAP

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Combination of HAPS

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR MANAGEMENT

Lippert Components-Indiana Frame Division
16700 Skyview Drive
Goshen, Indiana 46526

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F039-5477-00309	
Original issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996

First Minor Permit Modification: SMF039-9351	Pages Affected: 4, 6, 14, 18a, 19, 20, 20a-c, 22a
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: April 30, 1998

First Significant Permit Revision: 039-10691	Pages Affected: 3, 4, 4a, 19, 20, 20a, 20d, 22a,b Section Added: D.3
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a mobile home metal frame manufacturing source.

Responsible Official:	Edward Vasicek
Source Address:	16700 Skyview Drive, Goshen, Indiana 46526
Mailing Address:	16700 Skyview Drive, Goshen, Indiana 46526
Phone Number:	517-463-8341
SIC Code:	3440
County Location:	Elkhart
County Status:	Maintenance for Ozone Attainment for all other criteria pollutants
Source Status:	Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

(a) two (2) air assisted airless spray guns, located in two (2) booths identified as E-1 and E-2, and each equipped with dry filters for overspray control;

(b) two (2) air-assisted airless spray guns to be located in the existing permitted mobile home surface coating lines identified as E-1 and E-2, with a maximum capacity of coating 160.0 linear feet of metal mobile home frames per hour, and exhausted through two (2) existing stacks (S/V ID E1 and E2), respectively;

(c) one (1) air-assisted airless surface coating line, identified as E-3, with a maximum capacity of coating 166.01 linear feet of metal RV frames per hour, utilizing dry filters for particulate control, and exhausted through one (1) stack (S/V ID E3);

(d) four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and

(e) two (2) paint bays for the production of mobile home frames, identified as E-4, with five (5) airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

(b) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(c) Paved and unpaved roads and parking lots with public access.

(d) Welding activities emitting less than five (5) pounds per day or one (1) ton per year of a single HAP.

(e) Welding operations with PM_{10} emission less than twenty-five (25) pounds per day.

A.4 FESOP Applicability [326 IAC 2-8-2]
This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

(a) The Permittee shall also provide additional information as requested by IDEM, OAM, to determine the compliance status of the source in accordance with 326 IAC 2-8-5(a).

(b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that the IDEM, OAM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon written request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. For information claimed to be confidential, the Permittee shall furnish such records directly to both the U.S. EPA and IDEM, OAM, along with a claim of confidentiality.

Such confidentiality claims shall meet the requirements of 40 CFR Part 2, Subpart B (when submitting to U.S. EPA) and 326 IAC 17 (when submitting to IDEM, OAM).

SECTION D.1 FACILITY OPERATION CONDITIONS

(a)	two (2) air assisted airless spray guns, located in two (2) booths identified as E-1 and E-2, and each equipped with dry filters for overspray control;
(b)	two (2) air-assisted airless spray guns to be located on the existing permitted mobile home surface coating lines (E-1 and E-2), with a maximum capacity of coating 160.0 linear feet of metal mobile home frames per hour, and exhausted through two (2) existing stacks (S/V ID E1 and E2), respectively;
(c)	one (1) air-assisted airless surface coating line, identified as E-3, with a maximum capacity of coating 166.01 linear feet of metal RV frames per hour, utilizing dry filters for particulate control, and exhausted through one (1) stack (S/V ID E3);
(d)	four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and
(e)	two (2) paint bays for the production of mobile home frames, identified as E-4, with five (5) airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

Emissions Limitations [326 IAC 2-8-4(1)]

D.1.1 Volatile Organic Compounds [326 IAC 8-2-9]
Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating applied to the mobile home and RV metal frames shall be limited to 3.5 pounds of VOC per gallon of coating less water, for air dried coatings or forced warm air dried coatings at temperatures up to 194EFahrenheit;

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.2 Volatile Organic Compounds
The VOC usage at the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), shall be limited to a total of 99.0 tons per any twelve (12) consecutive months. This requirement satisfies the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), and shall render the requirements under 326 IAC 2-7 (Part 70 Program) not applicable.

D.1.3 Fine Particulate Matter (PM_{10})
The PM_{10} emissions from the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), shall not exceed 18.9 pounds per hour. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]
The PM from the four (4) surface coating lines, (E-1, E-2, E-3 and E-4) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.5 Hazardous Air Pollutants (HAPs)
The HAPs content delivered to the applicators of the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), including coatings, dilution solvents and cleanup solvents, shall be limited as follows:

a) The amount of any single hazardous air pollutant shall be less than 10 tons per twelve (12) consecutive month rolling period.

b) The amount of any combination of HAPs shall be less than 25 tons per twelve (12) consecutive month rolling period.

Compliance Determination Requirements

D.1.6 Volatile Organic Compounds (VOC)
Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.7 Particulate Matter Overspray
The dry filters for particulate matter overspray control shall be in operation at all times when the four (4) surface coating lines, (E-1, E-2, E-3 and E-4) are in operation.

D.1.8 Preventive Maintenance [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for each facility and its control device.

D.1.9 Monitoring
Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To document compliance with Conditions D.1.3 and D.1.4, observations shall be made weekly of the overspray while at least one of the booths is in operation.

Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.10 Daily Visible Emissions Notations

Daily visible emission notations of the spray booth stack exhaust, shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.11 Record Keeping Requirements

(a) To document compliance with the Conditions D.1.1, D.1.2 and D.1.5, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2, and the HAPs emission limits established in D.1.5.

(1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the month of use;

(3) The volume weighted VOC content of each coating used for each month;

(4) The cleanup solvent usage for each month;

(5) The total VOC and HAP usage for each month; and

(6) The weight of VOCs and HAPs emitted for each compliance period.

(b) To document compliance with Conditions D.1.9 and D.1.10, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventative Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.2 and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities

(a) Welding activities emitting less than five (5)pounds per day or one (1) ton per year of a single HAP.

(b) Welding operations with PM_{10} emission less than twenty-five (25) pounds per day:

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3]
Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each facility shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate of one hundred (100) pounds per hour up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirement

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]
The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Lippert Components, Inc.-Indiana Frame Division
Source Address: 16700 Skyview Dr. Goshen, Indiana 46526
Mailing Address: 16700 Skyview Dr. Goshen, Indiana 46526
FESOP No.: F039-5477-00309, SMF-039-9351, and SMF 039-10691
Facility: Surface Coating Booths E-1, E-2, E-3, E-4
Parameter: VOC usage
Limit: 99 tons per twelve (12) consecutive month period

YEAR: _____

Month	VOC Usage (tons) This Month	VOC Usage (tons) Previous 11 Months	VOC Usage (tons/yr) 12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Lippert Components, Inc.-Indiana Frame Division
Source Address: 16700 Skyview Dr. Goshen, Indiana 46526
Mailing Address: 16700 Skyview Dr. Goshen, Indiana 46526
FESOP No.: F039-5477-00309, SMF-039-9351, and SMF 039-10691
Facility: Surface Coating Booths E-1, E-2, E-3, E-4
Parameter: Hazardous Air Pollutants (HAPs)
Limit: Less than twenty five (25) tons of any combination of HAPS per twelve (12) consecutive month rolling period, less than ten (10) tons of any single HAP per twelve (12) consecutive month rolling period

YEAR: _____

Worst Case HAP

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Combination of HAPS

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for the First Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	**Lippert Components, Inc.**
Source Location:	**16700 Skyview Drive, Goshen, Indiana 46526**
County:	**Elkhart**
SIC Code:	**3440**
Operation Permit No.:	**F 039-5477-00309**
Operation Permit Issuance Date:	**December 11, 1996**
Permit Revision No.:	**039-10691-00309**
Permit Reviewer:	**Patrick T. Brennan/MES**

The Office of Air Management (OAM) has reviewed a FESOP revision application from Lippert Components, Inc., relating to the operation of a recreational vehicle (RV) and mobile home manufacturing source.

History/Source Definition

On February 25, 1999, Lippert Components, Inc. (LCI) submitted an application to the OAM requesting to increase production capacity of both RVs and mobile home frames. To do this, the applicant will construct two (2) additional paint bays (E-4) for mobile home frame production, and increase capacity of the RV frame production line by adding four (4) airless spray guns. Welding operations will be increased by the addition of forty-five (45) MIG welders and nine (9) stick welders.

Lippert Components, Inc. was issued a FESOP on December 11, 1996, and a significant permit modification (SMF) on April 30, 1998, to increase production and to add additional surface coating lines to their existing plant.

This recreational vehicle and mobile home manufacturing source consists of two (2) plants:

(a) Plant 1 is located at 16700 Skyview Dr., Goshen, IN, 46526, and

(b) Plant 2 is located at 16849 County Road 38, Goshen, IN 46526.

Since the two (2) plants are located on contiguous properties, have the same SIC codes and are owned by one (1) company, they are considered one (1) source. Following the completion of the construction and capacity increase permitted in the First Significant Modification to the FESOP in 1998, the applicant has moved all operations regulated by OAM into Plant 1.

Proposed Changes

The following changes have been made to the FESOP. Deleted language appears as ~~strikeouts~~, new language is **bolded.**

1. The following emission units have been added.

A.2 Emission Units and Pollution Control Summary
The stationary source consists of the following emission units and pollution control devices:

(d) four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and

(e) two (2) paint bays for the production of mobile home frames, identified as E-4, with airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

2. The following insignificant activities have been added to the source.

A.3 Insignificant Activities

The source modification also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(e) Welding operations with PM_{10} emission less than twenty-five (25) pounds per day:

3. The equipment list in Section D.1 has been changed as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

(a)	Two (2) air assisted airless spray guns, located in two (2) booths identified as E-1 and E-2, and each equipped with dry filters for overspray control;
(b)	Two (2) air-assisted airless spray guns to be located on the existing permitted mobile home surface coating lines (E-1 and E-2), with a maximum capacity of coating 160.0 linear feet of metal mobile home frames per hour, and exhausted through two (2) existing stacks (S/V ID E1 and E2), respectively;
(c)	One (1) air-assisted airless surface coating line, identified as E-3, with a maximum capacity of coating 166.01 linear feet of metal RV frames per hour, utilizing dry filters for particulate control, and exhausted through one (1) stack (S/V ID E3);
(d)	**four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and**
(e)	**two (2) paint bays for the production of mobile home frames, identified as E-4, with airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).**

4. Sections D.1.2, D.1.3 and D.1.4 have been modified to include the new surface coating line (E-4).

D.1.2 Volatile Organic Compounds
The VOC usage at the ~~three (3)~~ **four (4)** surface coating lines, (E-1, E-2, E-3 and **E-4**), shall be limited to a total of 99.0 tons per any twelve (12) consecutive months. This requirement satisfies the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), and shall render the requirements under 326 IAC 2-7 (Part 70 Program) not applicable.

D.1.3 Fine Particulate Matter (PM_{10})
The PM_{10} emissions from the ~~three (3)~~ **four (4)** surface coating lines, (E-1, E-2, E-3 and **E-4**), shall not exceed 18.9 pounds per hour. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]
The PM from the ~~three (3)~~ **four (4)** surface coating lines, (E-1, E-2, E-3 and **E-4**), shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

5. Section D.1.5 has been added to limit HAPs emissions. All subsequent sections have been renumbered.

D.1.5 Hazardous Air Pollutants (HAPs)

The HAPs content delivered to the applicators of the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), including coatings, dilution solvents and cleanup solvents, shall be limited as follows:

a) The amount of any single hazardous air pollutant shall be less than 10 tons per twelve (12) consecutive month rolling period.

b) The amount of any combination of HAPs shall be less than 25 tons per twelve (12) consecutive month rolling period.

6. Section D.1.7 (formerly D.1.6) has been modified to include the new surface coating line (E-4).

D.1.7 Particulate Matter Overspray

The dry filters for particulate matter overspray control shall be in operation at all times when the ~~three (3)~~ **four (4)** surface coating lines, (E-1, E-2, E-3 and **E-4**) are in operation.

7. Section D.1.9 (formerly D.1.8) has been modified to update the required frequency of inspections and observations.

D.1.9 Monitoring

Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To document compliance with Conditions D.1.3 and D.1.4, observations shall be made ~~daily~~ **weekly** of the overspray while at least one of the booths is in operation.

~~Weekly~~ **Monthly** inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

8. Section D.1.11 (formerly D.1.10) has been modified to include HAPs in recordkeeping and to update the required frequency of inspections and observations.

D.1.11 Record Keeping Requirements

(a) To document compliance with the Conditions D.1.1, D.1.2 **and D.1.6**, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2, **and the HAPs emission limits established in D.1.6.**

(1) The amount and VOC **and HAP** content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the month of use;

(3) The volume weighted VOC content of each coating used for each month;

(4) The cleanup solvent usage for each month;

(5) The total VOC **and HAP** usage for each month; and

(6) The weight of VOCs **and HAPs** emitted for each compliance period.

(b) To document compliance with Conditions D.1.8 and D.1.9, the Permittee shall maintain a log of ~~daily~~ **weekly** overspray observations, daily and ~~weekly~~ **monthly** inspections, and those additional inspections prescribed by the Preventative Maintenance Plan.

9. Section D.1.12 (formerly D.1.11) has been modified to include reporting for HAPs.

D.1.12 Reporting Requirements
A quarterly summary of the information to document compliance with Condition**s** D.1.2 **and D.1.5** shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

10. Section D.3 has been added to regarding insignificant activities.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities
(a) Welding activities emitting less than five (5)pounds per day or one (1) ton per year of a single HAP.
(b) Welding operations with PM_{10} emission less than twenty-five (25) pounds per day:

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3]
Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each facility shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate of one hundred (100) pounds per hour up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirement

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]
The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

11. The header of the FESOP Quarterly Report form for VOCs has been changed to reflect the addition of the mobile home bays (E-4) as follows:

Facility: Surface Coating Booths E-1, E-2, E-3 and **E-4**

12. An additional FESOP Quarterly Report form has been added for HAPs.

Existing Approvals

The source was issued a FESOP No. F 039-5477-00309 on December 11, 1996. The source has since received the following:

(a) First Significant Permit Modification No.: 039-9351, issued on April 30, 1998.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	**Operation**	**Height** (feet)	**Diameter** (feet)	**Flow Rate** (acfm)	**Temperature** (EF)
E-4	mobile home bays	22.0	3.0	15,000	70.0

Recommendation

The staff recommends to the Commissioner that the significant FESOP permit revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 25, 1999.

Emission Calculations

See Appendix A, pages 1 and 2 of this document for detailed VOC and HAPs emissions calculations from surface coating. Emissions of PM_{10} from welding operations are as follows. Although these emissions are insignificant as defined in 326 IAC 2-7-1(21), they are used in determining the PM_{10} FESOP limit.

Operation	Emission Factor	Maximum Capacity	Potential PM Emissions (lbs/hr)	Allowable PM Emissions (lbs/hr)	Potential PM Emissions (tons/yr)
forty-five (45) MIG welding stations	0.0055 lb PM / lb of wire	0.26 lbs wire / station / hour	0.064	9.43	0.28
nine (9) Stick welding stations	0.097 lb PM / lb of electrode (E7014)	8.40 lbs electrodes / hour	0.815	8.56	3.57
TOTALS	--	--	0.879	18.0	3.85

Emission Factors are from SARA 313 Reporting Guide.

Potential PM emissions = (Emission Factor)*(Capacity)*(8760 hrs/yr)(1 ton/2000 lb)

Allowable Emissions are based on 326 IAC 6-3-2 (Process Operations) where:

$E = 4.10P^{0.67}$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour.

A total process weight throughput increase of 6,929 pounds per hour on the RV line and a 6,000 pounds per hour capacity on the new mobile home line was used to calculate allowable emissions under 326 IAC 6-3 (Process Operations).

The six (6) MIG welding stations utilize welding wire that contains 1% Manganese. Therefore, potential Manganese emissions from the welding operations are equal to:

(0.064 lb PM/hr) * (1% Manganese) * (1 ton/2000 lb) * (8760 hr/yr) = 0.003 tons Mn/yr;

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	**Potential To Emit** (tons/year)
PM	174
PM_{10}	174
SO_2	0.0
VOC	82.6
CO	0.0
NO_X	0.0

Note: For the purpose of determining Title V applicability for particulates, PM_{10}, not PM, is the regulated pollutant in consideration.

HAPS	**Potential To Emit** (tons/year)
glycol ethers	59.3
TOTAL	59.3

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of particulate matter and VOC are equal to or greater than 25 tons per year. Therefore, the source requires a significant revision to the existing FESOP under the provisions of 326 IAC 2-8.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM_{10} is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(d) The source has agreed that the emission limits following this First Significant Permit Revision to the FESOP will continue to satisfy the requirements of 326 IAC 2-8. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1996 OAM emission data.

Pollutant	**Actual Emissions** (tons/year)
PM	5.60
PM_{10}	5.60
SO_2	0.0
VOC	0.0
CO	0.0
NO_X	0.0
HAP	0.0

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits and controls.

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM_{10}	SO_2	VOC	CO	NO_X	Single HAP	Combined HAPs
PTE from Proposed First Significant FESOP Revision, Booths E-3, E-4	3.50	3.50	0.0	82.6	0.0	0.0	59.3	59.3
PTE from Proposed First Significant FESOP Revision, Insignificant Activities	3.95	3.95	0.0	0.10	0.10	1.30	neg	neg
Total PTE from Existing FESOP including First Significant FESOP Modification, Booths E-1, E-2, E-3 (All Significant Activities)	22.4	22.4	0.0	128.3	0.0	0.0	0.0	0.0
Total PTE from Existing FESOP including First Significant Modification, Insignificant Activities	12.3	12.3	0.0	0.0	0.20	0.80	neg	neg
Total Limited PTE from source following First Significant FESOP Revision	42.2	42.2	0.0	99	0.30	2.10	10	25
Revised FESOP Limits	NA	82.8*	99	99	99	99	10	25

*Note: PM_{10} limit reflects standard 326 IAC 2-8 FESOP limit minus insignificant activities. (99 TPY - 3.95 TPY - 12.3 TPY = 82.8 TPY) This limit in enforced as an hourly limit of 18.9 pounds per hour in Section D.1.3 of the modified permit.

County Attainment Status

The source is located in Elkhart County.

Pollutant	**Status**
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_X) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the VOC usage at the four surface coating lines, E-1, E-2, E-3 and E-4, shall be limited to a total of 99.0 tons per any twelve (12) consecutive months. PM_{10} emissions from the four surface coating lines, E-1, E-2, E-3 and E-4, shall be limited to a total of 99.0 tons per any twelve (12) consecutive months, including emissions from insignificant activities. The emission limits under this FESOP revision continue to satisfy the requirements of 326 IAC 2-8, and 326 IAC 2-7 (Part 70 Permit Program) does not apply to this source. This requirement also satisfies the requirements of 326 IAC 2-2 and 326 IAC 2-3.

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60)) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3 (Process Operations)

(a) Pursuant to 326 IAC 6-3 (Process Operations), the mobile home bays (E-4) shall comply with the following requirements:

(1) The dry filters for particulate matter overspray control shall be in operation at all times when the paint booths are in operation.

(2) The spray guns shall comply with 326 IAC 6-3-2(c) using the following equation:

$E = 4.10P^{0.67}$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour.

(3) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the filters.

This source will comply with the requirements of 326 IAC 6-3-2 by using dry filters for PM overspray control on the spray guns.

(b) Pursuant to 326 IAC 6-3 (Process Operations), the forty-five (45) MIG welding stations shall not exceed the allowable particulate matter (PM) emission rate of 9.43 pounds per hour from all forty-five (45) stations based on a potential throughput of 6,929 pounds per hour.

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by the use of this equation:

$E = 4.10P^{0.67}$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour.

$E = 4.10(3.46 \text{ tons/hr})^{0.67}$
E = 9.43 pounds PM per hour;

The potential emissions from the forty-five (45) MIG welders are equal to 0.064 pounds per hour, and are therefore in compliance with 326 IAC 6-3 (Process Operations).

(c) That pursuant to 326 IAC 6-3 (Process Operations), the nine (9) stick welding stations shall not exceed the allowable particulate matter (PM) emission rate of 8.56 pounds per hour from all ten (10) stations based on a potential throughput of 6,000 pounds per hour.

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by the use of this equation:

$E = 4.10P^{0.67}$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour.

$E = 4.10(3.00 \text{ tons/hr})^{0.67}$
E = 8.56 pounds PM per hour;

The potential emissions from the nine (9) stick welding stations are equal to 0.815 pounds per hour and are therefore in compliance with 326 IAC 6-3 (Process Operations).

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicators in the mobile home bays shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for air dried coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement.

Compliance Requirements

The compliance monitoring requirements applicable to this source modification are as follows:

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters in the mobile home bays. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the mobile home bays while one or more of the booths are in operation.

(b) Monthly inspections shall be performed of the coating emissions from the mobile home bay stack (E4) and the presence of overspray on the rooftops and the nearby ground.

(c) The amount of VOC, any single HAP and any combination of HAPS delivered to the mobile home bay applicators, including cleanup solvents, must be monitored and recorded on a monthly basis.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The operation of this recreational vehicle and mobile home manufacturing source shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 039-10691-00309.

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for Federally Enforceable State Operating Permit (FESOP)

Source Name:	**Lippert Components, Inc.**
Source Location:	**16700 Skyview Drive, Goshen, Indiana 46526**
County:	**Elkhart**
FESOP:	**F 039-5477-00309**
SIC Code:	**3440**
Permit Reviewer:	**Patrick T. Brennan/MES**

On May 8, 1999, the Office of Air Management (OAM) had a notice published in the Goshen News, Goshen, Indiana, stating that Lippert Components, Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a recreational vehicle (RV) and mobile home manufacturing source with dry filters for air pollution control. The notice also stated that OAM proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

On May 24, 1999, Robert D. Waugaman of Bruce Carter Associates, submitted the following comments on the proposed FESOP. The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded)**:

Comment 1:

A.1 - Please change the Responsible Official from Gary McPhail to Edward Vasicek.

Response 1:

Section A.1 of the permit has been changed as follows:

A.1 General Information
The Permittee owns and operates a mobile home metal frame manufacturing source.

Responsible Official: ~~Gary McPhail~~ **Edward Vasicek**

Comment 2:

A.2(e) should be corrected to show that five (5) airless spray guns are being added along with the addition of the two (2) paint bays. Please change the corresponding description in Section D.1(e) also.

Response 2:

This comment is a clarification of the equipment list, and has no effect on the potential emissions calculations. Sections A.2(e) and D.1(e) of the permit have been changed as follows:

A.2 Emission Units and Pollution Control Summary
The stationary source consists of the following emission units and pollution control devices:

(e) two (2) paint bays for the production of mobile home frames, identified as E-4, with **five (5)** airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

SECTION D.1 FACILITY OPERATION CONDITIONS

(e) two (2) paint bays for the production of mobile home frames, identified as E-4, with **five (5)** airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

Comment 3:

Condition D.1.1(a) references Condition D.1.6 two (2) times in the first paragraph. It appears that this reference should be changed to Condition D.1.5.

Response 3:

The comment is correct. The permit has been revised as follows:

D.1.11 Record Keeping Requirements
(a) To document compliance with the Conditions D.1.1, D.1.2 and **D.1.5** ~~D.1.6~~, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2, and the HAPs emission limits established in **D.1.5** ~~D.1.6.~~

Appendix A: Emission Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Lippert Components, Inc.
Address City IN Zip: 16700 Skyview Dr., Goshen, IN 46526
Permit Revision : 039-10691
Plt ID: 039-00309
Reviewer: Patrick Brennan/MES
Date: March 17, 1999

Potential Emissions (uncontrolled):

Material (as applied)	Process	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit) (1)	Maximum (unit/hour) (2)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency
Asphalt Based Coating	Mobile Home Bay (E-4)	8.40	45.00%	44.50%	0.50%	44.87%	54.60%	0.070	160.00	0.1	0.04	0.47	11.29	2.06	113.32	0.15	0.5
Black W.R. Enamel	RV Line (E-3)	9.35	67.90%	57.10%	10.80%	64.09%	22.00%	0.049	271.50	2.8	1.01	13.43	322.41	58.84	87.44	9.18	0.5
Aluminum W.R. Enamel	RV Line (E-3)	8.48	75.10%	58.80%	16.30%	59.86%	21.50%	0.049	271.50	3.4	1.38	18.39	441.33	80.54	61.52	12.86	0.5
Total Potential Uncontrolled (worst-case*) Emissions:												**18.86**	**452.62**	**82.60**	**174.84**		

Potential Emissions (controlled):

	Control Efficiency: VOC	Control Efficiency: PM	Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr
Total Potential Controlled (worst-case*) Emissions:	0.00%	98.00%	**18.86**	**452.62**	**82.60**	**3.50**

(1) Gallons per unit is expressed here as gallons per linear foot (gal/linear foot).
(2) Units per hour is expressed here as linear feet per hour (linear feet/hour).
* Total potential uncontrolled and controlled VOC and PM emissions are based on worst-case coatings for each booth. The Aluminum W.R. Enamel was used for the RV booth (E-3).

Methodology:

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids) * Transfer Efficiency
Total = Sum of Worst Case Coatings for each booth.
Controlled emission rate = uncontrolled emission rate * (1 - control efficiency)

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Lippert Components, Inc.
Address City IN Zip: 16700 Skyview Dr., Goshen, IN 46526
Permit Revision: 039-10691
Plt ID: 039-00309
Permit Reviewer: Patrick Brennan/MES
Date: March 17, 1999

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Glycol Ethers								Glycol Ethers Emissions (tons/yr)	
Aluminum W.R. Enamel	8.48	0.049	271.50	12.00%								59.29	

Total State Potential Emissions **59.29**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Hapcalc.wk4 9/95